

BY CASEY CREAMER

We are looking to buy a new saw, but the only one we can get from our distributor in a reasonable time frame is a 6 x 8 gauge instead of a 7 x 8 gauge saw like what we have been running for years. Do you think that will be a problem?

It definitely won't be what I would call "a problem." But that doesn't mean it is the best solution either. If you are really hurting to get a new saw quickly, it just might be your only viable solution.

Personally, I am not a big fan of 6 x 8 gauge saws. Circular and band saw thicknesses all try to adhere to the Birmingham Wire Gauge, which is a system for measuring wire diameter and metal plate thickness in thousandths of an inch. The larger the gauge number, the smaller the measurement.

9 Gauge = 0.148"

8 Gauge = 0.165"

7 Gauge = 0.180"

6 Gauge = 0.203"

When I started hammering saws, the most common configuration was 7 x 8 gauge, although there were many 8 x 9 gauge saws still around. And occasionally I would encounter a few 6 x 7 gauge saws. Somewhere around the late eighties or early nineties I began to see a few 6 x 8

gauge saws start to appear. Here is what I think happened. In those days there were still a lot of mill supply houses around that had sales people on the road who could carry a lot of bits and shanks and sawmill tools with them as they made sales calls on all of their sawmill accounts.

Some of them even had new saws with them or could at least take an order for a new saw and deliver it on their next trip. Salespeople like to feel welcome when they stop in, as opposed to feeling like they are just infringing on your otherwise productive time. Sawmillers have a lot of work to do, but they are usually happy to take a short break, especially if they think they can learn something new from their salesperson. From the salesperson's point of view, it is not nearly as much fun to show up and just ask if you need any more bits and shanks today as it is to come in and say, "Let me show you the latest innovation in sawmilling."

By the same token, it might have been one of the saw manufacturer's salespersons' idea of a way to feel more welcome at the sawmill supply house by being able to show them the latest and greatest idea in sawmilling.

Either way, I see the whole idea of a 6 x 8 gauge saw as nothing more than a way to show your customer something new to pique their interest. Now, if your mill is having a problem where you are actually cracking and breaking your headsaws just outside the collar line, then indeed you should have a saw that is thicker in that area. That is a spot where the 6 x 8 gauge saw would be beneficial, although in that particular case I would recommend going to a 6 x 7 gauge blade and running 5/16" bits.

But how many of you have ever broken a saw just outside the collar line? I certainly haven't seen that very often with headsaws. And if you are breaking saws there, maybe you should figure out what you are

doing wrong to cause that situation. I can guarantee you that it is not going to happen by just pushing a saw too hard. To do that on a head rig, you are either hitting the jog button while in the cut, or maybe getting the saw way too hot in that area and then throwing cold water on it to cool it.

My first contention is that there is very rarely a legitimate need for a 6 x 8 gauge saw instead of a 7 x 8 or a 6 x 7 gauge saw. Here is my second contention. With a normal split gauge saw such as 7 x 8, the center of the saw is roughly .015" thicker at the center than it is at the rim. When your saw is hammered correctly, all of the extra material is on the board side because the log side of the saw should be flat. If that extra material was on the log side, the saw would surely heat and run off line. Having just .015" extra on the board side is basically out of harm's way because your spreader bar just behind the tail end of the saw will keep the board from rubbing the board side of the saw.

Now when you go to a 6 x 8 gauge saw, the rim is .165" and the eye of the saw is now .203". That means you have an extra .038" on the board side or .023" more than you would have had with a 7 x 8. Again, it's all on the board side, so it isn't a huge problem, but there is no doubt in my mind that what you have is a saw that regularly takes on just a little more heat than it would of if you ran a 7 x 8 gauge saw. Because you have a spreader bar, that is not enough heat to make the saw run off line, but it is definitely a tiny bit more heat than you would have had otherwise. I believe that the result is that you have a saw that will need to be hammered just a little bit sooner than would have been the case with a 7 x 8 gauge saw. It may not even be enough difference for you to notice because there are so many other variables that go into getting your saw to the point where it needs to be hammered. I would also say that the 6 X 8 is just a little more





susceptible to having issues when your kerf is starting to get too narrow, where a 7 x 8 might have bought you a little more forgiveness in that particular area.

It is not that the 6 x 8 won't run for you. Unless you are breaking saws at the collar line, I think you will be better off in the long run to stay with 7 x 8 or 6 x 7 with a wider bit.

We also have to keep in mind that there are many mills running with this 6 x 8 gauge configuration and many of their sawyers swear by it. They are sure that these 6 x 8 gauge saw outperform their old 7 x 8 gauge saws. Chances are they are correct about these saws running better than their old worn out 7 x 8 gauge saws. Of course, when you compare a new saw to an old worn out saw, which one would you expect to perform better? When you make comparisons, you have to factor in all of the different variables. I remember a customer a number of years ago who was extremely impressed with the new sawyer he had hired after his old one left him. He told me how much the production and quality of the lumber had increased. But he didn't factor in the fact that when the new sawyer signed on, part of the deal was to get rid of all of the old and completely worn out saws and purchase a bunch of new ones from me. Of course, the production went up in a big way.

I think that the sawyers think that because there is more metal, the saw will stand up to more abuse. But as you all know these saws are flexible enough that when one has a reason to run off line, it will run off line no matter how heavy the center of the saw is.

The extra steel in a 6 x 8 gauge saw means that it is only stronger in the sense that it will take more force to actually break it. But the reality is that the extra material strength doesn't make it any more likely to stand up straight in the cut if you give it a reason not to.

When the bits are sharpened out of square and high to the board side, the saw is going to run out no matter how thick it is.

Interested to learn more from Casey Creamer? You can watch our video on how Casey hammers circular saws on *The Northern Logger* YouTube page. Just search for "The Northern Logger" on YouTube and click the video entitled "How to Hammer a Circular Saw with Casey Creamer." Please send future questions about sawmills and their operation to Casey Creamer, saw doctor and president of Seneca Saw Works, Inc., PO Box 681, Burdett, NY 14818, (607) 546-5887. You can also reach out by email: casey@senecasaw.com.



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